Remarks

Claims 4, 6, 10, 11, 18-20, 26, 27, 30, and 37-41 are withdrawn. Claims 1-3,5,7-9,12-17,21-25,28,29, 31-36, and 42 are pending and reconsideration of those claims is requested.

Claim 1 recites an apparatus for sensing the level of fluid within a container and includes a base fixed within the container and a movable member supported by the base for relative positioning with respect to the base. A float member moves relative to the base as the level of fluid in a container changes and an arm attached to the movable member and float member wherein the position of the float is translated into movement of the moveable member with respect to said base. At least one magnetic flux sensor is located within the container and is coupled to one of the moveable member or base. The flux sensor creates an electrical output signal in response to a change in magnetic flux density. At least one magnet is disposed proximate the magnetic flux sensor for providing a magnetic field to induce a change in electrical output response from the magnetic flux sensor as the float member moves with changes in fluid level.

Claim 1 is rejected over the Patel patent (US 5,023,806) under 35 USC 102(b). Figures 2 and 3 of the Patel patent depict a remote level sensing unit 20 mounted *on but not within* a propane tank. Both the drive magnet 29 and the slave magnet 55 are located outside and attached to the propane tank. In the invention of claim 1 the magnetic flux sensing member is located within the chamber and therefore the invention is not anticipated by the Patel reference. Furthermore, since Patel has taken care to isolate the sensor made up of the combination of the drive and slave magnets, there is no suggestion for the apparatus featured in applicants' claim 1. For these reasons claim 1 is patentable.

Claims 2, 3, 5-20, 25, 28, 29, 31, and 32 depend from allowable claim 1 and are also allowable.

The Examiner's attention is further directed to claim 13. This claim features a fluid level sensor according to claim 1 wherein the base has a cavity for housing the magnetic flux sensor and further comprising encapsulant within said cavity.

There were no prior art rejections regarding claim 13 in the last office action but since claim 15 has a similar scope it is believed that omission may have

been an oversight. The Examiner relied upon the elements 31, 32, a lens cap and transparent lens portion. These recitations do not show or suggest an encapsulant within a cavity within a base as recited and therefore claims 13 and 15 are clearly allowable.

The Examiner is also specifically referred to claim 31. This claim features a fluid level sensor according to claim 1 wherein a float geometry defines a float thickness that is less than a width dimension of generally flat float top and bottom surfaces to enhance float buoyancy for low fluid level detection. This claim was rejected as being obvious in view of the combination of the Patel patent and US 3,256,907 to Clark et al. Turning to Figure 2 of Clark et al, however, it appears that the thickness of the float 77 is greater than the width of that sensor. If the Examiner would explain more clearly the belief that the depictions of the Clark et al patent render obvious the subject matter of claim 31 it would be appreciated. Since the claimed features do not appear to be shown or suggested claim 31 is allowable for this additional reason.

Claim 33 features a method for fabricating a sensor for sensing the level of fluid within a container by fixing a base within the container and coupling a movable member to the base for relative positioning with respect to the base. A float member is provided that moves up and down with the level of fluid in a container changes. The float member is attached to the moveable member by an arm attached to the moveable member and float member wherein the position of the float is translated into movement of the moveable member with respect to the base. A magnetic flux sensor is positioned within the chamber by coupling the magnetic flux sensor to one of the moveable member or base to create an electrical output signal in response to a change in magnetic flux density. At least one magnet is disposed proximate the magnetic flux sensor coupled to one of the moveable member or base for providing a magnetic field to induce a change in electrical output response from the magnetic flux sensor as the float member moves up and down with changes in fluid level.

The arguments presented above with regard to claim 1 are appropriate here. Figures 2 and 3 of the Patel patent depict a remote level sensing unit 20 mounted *on but not*

within a propane tank. Both the drive magnet 29 and the slave magnet 55 of the Patel patent are located outside and attached to the propane tank. In the invention of claim 33 the magnetic flux sensing member is positioned within the chamber and therefore the claimed invention is not anticipated by the Patel reference. Furthermore, since Patel has taken care to isolate the sensor made up of the combination of the drive and slave magnets from fluid within the tank, there is no suggestion for the method featured in applicants' claim 33. For these reasons claim 33 is patentable.

Claims 34 – 36 depend from allowable claim 33 and are also allowable. The above commentary regarding the rejection of claims 13 and 15 is also appropriate for these three dependent claims.

Claim 42 is newly submitted. In the last office action the allowablity of claim 22 was noted. Claim 42 corresponds to this claim with a slight rewording and is therefore also allowable. The dependency of claims 21, 23, and 24 has been changed to amend from allowable claim 42 and are also allowable.

All pending claims are in condition for allowance and a prompt notification of allowance is solicited.

Respectfully Submitted,

Stephen Schultz

Stephen J. Schultz

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